

Title (en)

R-HYDROXYNITRILLYASES HAVING IMPROVED SUBSTRATE TOLERANCE AND THE USE THEREOF

Title (de)

R-HYDROXYNITRILLYASEN MIT VERBESSERTER SUBSTRATAKZEPTANZ UND DEREN VERWENDUNG

Title (fr)

R-HYDROXYNITRILLYASES A COMPATIBILITE AMELIOREE AVEC LE SUBSTRAT ET UTILISATION DESDITES SUBSTANCES

Publication

EP 1613748 B1 20090415 (DE)

Application

EP 04713857 A 20040224

Priority

- EP 2004001778 W 20040224
- AT 4472003 A 20030320

Abstract (en)

[origin: WO2004083424A1] The invention relates to R-hydroxynitrillyases from the family of Rosaceae that are characterized by an improved substrate tolerance and increased stability. In the active center of the R-hydroxynitrillyases either a) an alanine group is substituted by glycine, valine, leucine, isoleucine, or phenylalanine or b) a phenylalanine group is substituted by alanine, glycine, valine, leucine or isoleucine, or c) a leucine group is substituted by alanine, glycine, valine, isoleucine or phenylalanine, or d) an isoleucine group is substituted by alanine, glycine, valine, leucine or phenylalanine. The invention also relates to the use of these lyases in the production of enantiomer-pure R- or S-cyanohydrides.

IPC 8 full level

C12N 9/88 (2006.01); **C12P 13/00** (2006.01)

CPC (source: EP US)

C12N 9/88 (2013.01 - EP US); **C12P 13/004** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004083424 A1 20040930; AT 412156 B 20041025; AT A4472003 A 20040315; AT E428775 T1 20090515; CA 2519633 A1 20040930; DE 502004009356 D1 20090528; EP 1613748 A1 20060111; EP 1613748 B1 20090415; ES 2323462 T3 20090716; JP 2006520201 A 20060907; US 2006105434 A1 20060518; US 7572608 B2 20090811

DOCDB simple family (application)

EP 2004001778 W 20040224; AT 04713857 T 20040224; AT 4472003 A 20030320; CA 2519633 A 20040224; DE 502004009356 T 20040224; EP 04713857 A 20040224; ES 04713857 T 20040224; JP 2006504454 A 20040224; US 54827105 A 20050907